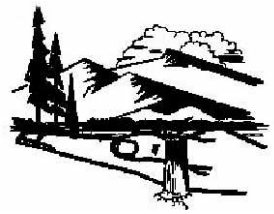




Mark Gordon, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Todd Parfitt, Director

May 18, 2022

Mr. Carl Daly
Acting Director
Air and Radiation Division
EPA Region 8
1595 Wynkoop St.
Denver, CO 80202

Re: Initial Notification of Air Quality Division 2020 PM_{2.5} Wildfire Exceptional Events

Dear Mr. Daly,

Attached is an initial notification of a wildfire smoke exceptional event that occurred in the western regions of the United States during the time frame of August 2020 through October 2020 that led to several exceedances of the 24-hour PM_{2.5} NAAQS. While the wildfire smoke plume was regional in nature and was observable throughout the state during the event, it did not cause all monitors to exceed the particulate matter (PM) National Ambient Air Quality Standard (NAAQS) throughout the event. Smoke from the wildfires in Oregon, California, Idaho, Utah, Montana, Colorado, Washington, and Wyoming impacted and resulted in thirty-seven (37) recorded exceedances of the United States Environmental Protection Agency's (US-EPA) 24-hour PM_{2.5} NAAQS. The Wyoming Department of Environmental Quality – Air Quality Division (WDEQ-AQD) has evaluated the initial notification and circumstances surrounding the event and represents that the event should be evaluated by the US-EPA Region 8 as a wildfire exceptional event.

WDEQ-AQD is submitting an "Initial Notification of Potential Exceptional Event" and flagging the data in EPA's Air Quality System (AQS) as per 40 CFR §50.14(c) (2) (i) as a result of elevated PM_{2.5} concentrations. The WDEQ-AQD requests that the Administrator determines that this event meets the provisions outlined in 40 CFR 50.14 (a) (1) (F) as a regulatory determination made on a case-by-case basis. The WDEQ-AQD considers this event to be of regulatory significance because of the WDEQ-AQD's reliance on ambient data to determine compliance with the NAAQS at state run State and Local Air Monitoring Stations (SLAMS) and Special Purpose Monitors (SPM). Additionally, these data are used in WDEQ-AQD's permitting process as well as by the US-EPA and third party interests in evaluating Wyoming's air quality. These reasons demonstrate the need to accurately portray anthropogenic versus non-

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ADMIN/OUTREACH (307) 777-7937	ABANDONED MINES (307) 777-6145	AIR QUALITY (307) 777-7391	INDUSTRIAL SITING (307) 777-7369	LAND QUALITY (307) 777-7756	SOLID & HAZ. WASTE (307) 777-7752	WATER QUALITY (307) 777-7781
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anthropogenic or “exceptional” air quality issues to the public by means of excluding exceptional event concurred data from the data record.

It is also the WDEQ-AQD’s stance that any exceedance caused by an exceptional event is significant and that it is important to demonstrate to the public the difference between exceedances that are anthropogenic versus those that are non-anthropogenic or exceptional in nature. Properly characterizing these exceedances in the public record and providing scientific evidence supporting the claim of exceptionality is essential to our shared role of serving the public. These data are used by the public, researchers, and other agencies to make scientific, public health, and policy decisions. These data must be properly flagged and concurred with in the US-EPA’s AQS in order for those data to be handled correctly and reflect the monitor design values. Without the critical step of determining concurrence, data is often misused by these entities to support decisions that may have consequences on a local or national level. Additionally, the numerous exceedances of the 24-hour PM_{2.5} NAAQS will affect future years design values, with the potential of a NAAQS violation.

Due to the above mentioned factors, the WDEQ-AQD considers these exceedances to meet the criteria of regulatory significance and requests that the Administrator make a determination under 40 CFR 50.14 (a) (1) (F) that the US-EPA will agree to review an Exceptional Event demonstration for this event.

Please contact Darla J. Potter, AQRM Program Manager, with questions at 307-777-7380.

Sincerely,



Darla J. Potter
Air Quality Resource Program Manager
Air Quality Division

Cc: Monitoring Section Supervisor, AQD

EE Initial Notification Summary Information

PM_{2.5} Exceedance

Submitting Agency: State of Wyoming- Air Quality Division

Agency Contact: Darla Potter

Date Submitted: 5/18/2022

Applicable NAAQS: 2012 PM_{2.5} Annual 24-Hour (35 µg/m³), 2012 PM_{2.5} Annual PM_{2.5} Annual Mean (12 µg/m³)

Affected Regulatory Decision¹: F) Case by case basis – see cover letter

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/ Unclassifiable

Design Value Period (list three year period): 2018-2020

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (ug/m ³)	Notes (e.g. event name, links to other events)
8/21/2020	Wildfire	IT	56-013-0099 POC-1	South Pass	36.7	Wildfire Exceptional Event Demonstration August-October 2020
8/21/2020	Wildfire	IT	56-035-0101 POC-1	Pinedale Gaseous	56.0	Wildfire Exceptional Event Demonstration August-October 2020
8/22/2020	Wildfire	IT	56-001-0006 POC-11	Laramie SLAMS	38.0	Wildfire Exceptional Event Demonstration August-October 2020
8/22/2020	Wildfire	IT	56-013-0004 POC-3	Riverton Mobile	36.1	Wildfire Exceptional Event Demonstration August-October 2020
8/22/2020	Wildfire	IT	56-013-1003 POC-11	Lander SLAMS	36.9	Wildfire Exceptional Event Demonstration August-October 2020

8/22/2020	Wildfire	IT	56-025-001 POC-11	Casper SLAMS	36.3	Wildfire Exceptional Event Demonstration August-October 2020
8/22/2020	Wildfire	IT	56-029-0001 POC-11	Cody SLAMS	39.5	Wildfire Exceptional Event Demonstration August-October 2020
8/22/2020	Wildfire	IT	56-035-0101 POC-1	Pinedale Gaseous	41.5	Wildfire Exceptional Event Demonstration August-October 2020
8/22/2020	Wildfire	IT	56-039-1006 POC-11	Jackson SLAMS	40.2	Wildfire Exceptional Event Demonstration August-October 2020
9/3/2020	Wildfire	IT	56-013-0004 POC-3	Riverton Mobile	69.7	Wildfire Exceptional Event Demonstration August-October 2020
9/3/2020	Wildfire	IT	56-013-1003 POC-11	Lander SLAMS	61.8	Wildfire Exceptional Event Demonstration August-October 2020
9/3/2020	Wildfire	IT	56-025-0001 POC-11	Casper SLAMS	39.5	Wildfire Exceptional Event Demonstration August-October 2020
9/3/2020	Wildfire	IT	56-025-0100 POC-3	Casper Gaseous	41.2	Wildfire Exceptional Event Demonstration August-October 2020
9/17/2020	Wildfire	IT	56-025-0100 POC-3	Casper Gaseous	45.0	Wildfire Exceptional Event Demonstration August-October 2020
9/18/2020	Wildfire	IT	56-013-0004 POC-3	Riverton Mobile	37.6	Wildfire Exceptional Event Demonstration August-October 2020

9/18/2020	Wildfire	IT	56-013-1003 POC-1	Lander SLAMS	37.2	Wildfire Exceptional Event Demonstration August-October 2020
9/18/2020	Wildfire	IT	56-029-0001 POC-1	Cody SLAMS	40.5	Wildfire Exceptional Event Demonstration August-October 2020
9/25/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	52.6	Wildfire Exceptional Event Demonstration August-October 2020
9/26/2020	Wildfire	IT	56-021-0100 POC-3	Cheyenne NCore	58.9	Wildfire Exceptional Event Demonstration August-October 2020
9/26/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	37.3	Wildfire Exceptional Event Demonstration August-October 2020
9/30/2020	Wildfire	IT	56-001-0006 POC-1	Laramie SLAMS	37.6	Wildfire Exceptional Event Demonstration August-October 2020
9/30/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	53.7	Wildfire Exceptional Event Demonstration August-October 2020
10/2/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	99.9	Wildfire Exceptional Event Demonstration August-October 2020
10/4/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	87.6	Wildfire Exceptional Event Demonstration August-October 2020
10/5/2020	Wildfire	IT	56-021-0100 POC-3	Cheyenne NCore	47.9	Wildfire Exceptional Event Demonstration August-October 2020
10/5/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	48.2	Wildfire Exceptional Event Demonstration August-October 2020

10/6/2020	Wildfire	IT	56-001-0006 POC-1	Laramie SLAMS	106.6	Wildfire Exceptional Event Demonstration August-October 2020
10/6/2020	Wildfire	IT	56-021-0100 POC-1	Cheyenne NCore	45.9	Wildfire Exceptional Event Demonstration August-October 2020
10/6/2020	Wildfire	IT	56-021-0100 POC-2	Cheyenne NCore	44.8	Wildfire Exceptional Event Demonstration August-October 2020
10/6/2020	Wildfire	IT	56-021-0100 POC-3	Cheyenne NCore	67.5	Wildfire Exceptional Event Demonstration August-October 2020
10/6/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	123.6	Wildfire Exceptional Event Demonstration August-October 2020
10/7/2020	Wildfire	IT	56-021-0100 POC-3	Cheyenne NCore	41.7	Wildfire Exceptional Event Demonstration August-October 2020
10/7/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	51.3	Wildfire Exceptional Event Demonstration August-October 2020
10/8/2020	Wildfire	IT	56-021-0100 POC-3	Cheyenne NCore	47.2	Wildfire Exceptional Event Demonstration August-October 2020
10/8/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	88.3	Wildfire Exceptional Event Demonstration August-October 2020
10/9/2020	Wildfire	IT	56-001-0006 POC-11	Laramie SLAMS	42.7	Wildfire Exceptional Event Demonstration August-October 2020
10/9/2020	Wildfire	N/A	NOT IN AQS	Laramie Mobile BAM	42.3	Wildfire Exceptional Event Demonstration August-October 2020

1 designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

B) Exceeding Monitors Information

(listing of all monitors in the planning area that exceeded due to this Exceptional Event, regardless of operating agency, and regardless of whether or not they are impacted by other EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above) <i>3 Year Ave. 24 Hr. DV (35µg/m³)/3 Year AVE. Annual DV(12µg/m³)</i>	Design Value (with EPA concurrence on all events listed in table A above) <i>3 Year Ave. 24 Hr. DV (35µg/m³)/3 Year AVE. Annual DV(12µg/m³)</i>
Laramie SLAMS (56-001-0006 – POC 1 & 11) 8/22/2020, 9/30/2020, 10/6/2020, 10/9/2020	21/4.9	15/4.3
Riverton Mobile* (56-013-0004 – POC 3) 8/22/2020, 9/3/2020, 9/18/2020	36/8.0*	22.5/6.2*
South Pass (56-013-0099 – POC 1) 8/21/2020	14/2.9	14/2.9
Lander SLAMS (56-013-1003 – POC 1 & 11) 8/22/2020, 9/3/2020, 9/18/2020	28/7.2	23/6.8
Cheyenne NCore (56-021-0100 – POC 3) 9/26/2020, 10/5/2020, 10/6/2020, 10/7/2020, 10/8/2020	18/3.4	15/3.2
Cheyenne NCore (56-021-0100 – POC 1 & 11) 10/6/2020	18/3.7	13/3.6
Casper SLAMS (56-025-0001 – POC 11) 8/22/2020, 9/3/2020	20/4.7	14/4.4
Casper Gaseous† (56-025-0100 – POC 3) 9/3/2020, 9/17/2020	12/2.9†	11/2.8†
Cody SLAMS (56-029-0001 – POC 1 & 11) 8/22/2020, 9/18/2020	20/3.8	16/3.6
Pinedale Gaseous (56-035-0101 – POC 1) 8/21/2020, 8/22/2020	17/3.8	17/3.7
Jackson SLAMS (56-039-1006 – POC 11) 8/22/2020	18/4.5	18/4.4
Laramie Mobile BAM*(NOT IN AQS) 9/25/2020, 9/26/2020, 9/30/2020, 10/2/2020, 10/4/2020, 10/5/2020, 10/6/2020, 10/7/2020, 10/8/2020, 10/9/2020	100/20.7*	32/8.4*

*AQD Mobile Gaseous Stations and Mobile BAM Stations are typically deployed for no more than 12 months and usually do not possess a complete calendar year of data.

[†]Casper Gaseous PM_{2.5} monitoring began on 6/5/2019.

¹ designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

	Design Value	Design Value Monitor	Comment
Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	28/7.2	Lander SLAMS (56-013-1003 POC 1 & 11)	
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	23/6.8	Lander SLAMS (56-013-1003 POC 1 & 11)	
Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	21/4.9	Laramie SLAMS (56-001-0006 POC 1 & 11)	
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	15/4.3	Laramie SLAMS (56-001-0006 POC 1 & 11)	

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)

Laramie Mobile BAM (NOT IN AQS) 9/25/2020, 9/26/2020, 9/30/2020, 10/2/2020, 10/4/2020, 10/5/2020, 10/6/2020, 10/7/2020, 10/8/2020, 10/9/2020

Riverton Mobile (56-013-0004 – POC 3) 8/22/2020, 9/3/2020, 9/18/2020

Casper Gaseous (56-025-0100 – POC 3) 9/3/2020, 9/17/2020